The Gendered Brain by Gina Rippon

Discussions on gender are a minefield of opinions, with gender too frequently the loser to agenda. This is not surprising, given the complexity of the discussion, but it is unhelpfully muddled by opinions which are not grounded in evidence and coloured by bias. Nevertheless, conversation which seeks to put evidence at its core helps to move the discussion onto a more useful level. Gina Rippon’s The Gendered Brain does just this, drawing on work in cognitive neuroscience and psychology to tackle the issues surrounding gender. Outside of the gender debate, neuroscience promises to push forward various stale philosophical discussions, and it is no different in this case.

Surprisingly, Gina Rippon turns to the history of science for the source of many unfounded conclusions, deftly outlining how science has been guilty of serving a sexist social agenda. She describes how science research has pushed the idea of a male and a female brain, in the past often based on outlandish experiments, such as skull volume measurements using bird seed. Even recently, despite the advent of brain imaging techniques, conclusions have been declared regarding male–female differences which are often unsubstantiated. However, her point is not that there are necessarily no differences between male and female brains, but that the evidence accumulated so far is inconclusive. Certainly, the kinds of differences we hear sometimes, like women are inherently worse at spatial tasks, therefore are less equipped for a career in engineering, are not robustly supported and are woefully unfair: we exist in a rule-based environment and our brains are extremely adept at identifying these rules, however biased.

It is perhaps lacking in discussion on sex differences elsewhere in the animal kingdom, as surely this is important when considering our own, but generally it is a well-balanced book, with fascinating information about our social brain, babies’ brains, and the issues around binary gender identity.

A year on from publication, sociopolitical views are as polarized as ever, so it is crucial that we learn to identify our inherent biases and how they inform our world view. Reading books like The Gendered Brain, which is witty, accessible, and thought-provoking, is an excellent way to do this.

Ben Borthwick
(University College London, UK)

The Model Thinker by Scott E. Page

The 12th chapter of The Model Thinker begins with a quote by Claude Shannon: “Information is the resolution of uncertainty.”

Making sense out of the deluge of information which virtually exists in today’s world requires much more than a unidimensional approach. With information comes complexity, and with complexity one needs to responsibly make sense out of it, be it to understand the world better or even to offer solutions to the problems at hand. Scott E. Page offers that solution through his book, The Model Thinker, which may very well serve as a manual to start learning about the ‘many-model approach.’ The author bolsters his claim to harness the power of this many-model approach by quite rightly saying that, “we achieve wisdom through a multiplicity of lenses”. From politics, economics, market dynamics, social issues to interpreting disease epidemiology and contagions requires professionals and academics to think beyond the chaos of data, cohesively arranging them into information, deriving knowledge from it and applying what is learned in various aspects, thus forging the basis of wisdom. Not only does the author succeed in advocating this motion in the first few pages of his book, but he goes on to inform the reader of the 25 classes of modelling approaches as well. The book offers theoretical (or mathematical) explanations of each model, and the last few chapters are dedicated to how multiple models can be applied to solve real-life problems. A recommended read for anyone who is stepping into the world of dealing with data.

Shinjini Chakraborty
(Ulm University Medical Centre, Germany)

Science! STEM Sticker Adventure by Hopscotch Girls

The lady scientist stickers are really cool! My favourites are the space ones!

Natasha: A really nice sticker book for girls and boys, the kids can set the scene, telling a story about the scientists and learn at the same time. The stickers aren’t reusable though and some are close to the spine of the book and touch for us to get out, so while this is a one-time use it made for a great lockdown afternoon activity together.

Reviewed by Claudia (aged 5), and her mum, Natasha
(London, UK)